ABSTRACT OF THE DISCLOSURE

2   An eye diagram analyzer equips each SUT data and clock signal channel with

individually variable delays. A specified combination (data signal delay, threshold and

4   which channel) is a location on an eye diagram, although the trace may or may not ever

go through that location. A counter counts the number of SUT clock cycles used

6   and another counter counts the number of times the specified combination of conditions

was met ("hits"). After watching a specified combination for the requisite length of time

8   or number of events, the number of SUT clock cycles involved and the associated number

of hits are stored in memory using a data structure indexed by the specified combination.

10   The process is repeated until all possible combinations within a stated range of data signal

delay and threshold voltage (using specified resolution/step sizes for delay and voltage)

12   have been investigated.